AMENDMENTS TO THE CLAIMS

1. (Original) A method for energy-saving operation of a dishwasher (110; 410), in particular for washing dishes (9; 414) or medical appliances, with the dishwasher (110; 410) having a total number $N \geq 2$ of electrical load elements (14, 15, 18, 19, 22, 23, 26, 33; 418, 420, 432, 438), having the following steps:

a) a group of n electrical load elements (14, 15, 18, 19, 22, 23, 26, 33; 418, 420, 432, 438) is assigned a maximum electrical total power p_{max};

b) each electrical load element i in the group of n electrical load elements (14, 15, 18, 19, 22, 23, 26, 33; 418, 420, 432, 438) is assigned a finite number m_i of discrete electrical power levels p_{ij} where $m_i \geq 2$:

- with there being a maximum power level p_{imax} for each i, where $p_{ij} \leq p_{imax}$,
- where the sum of all maximum power levels p_{imax} form a worst total power

$$p_{worst} = \sum_{i=1}^{n} p_{imax}$$ where $p_{max} < p_{worst}$, and

- where a regular power level p_{ireg} exists for each i, where $0 < p_{ireg} < p_{imax}$ for all i, j,

and where $\sum_{i=1}^{n} p_{ireg} = p_{max}$;

c) an optimum combination of power levels $p_{ij}(B)$ is selected in a demand determination step, as a function of an operating state B of the dishwasher (110; 410),

- where the selected power level $p_{ij}(B)$ for each i is matched to the power demand of the load element i (14, 15, 18, 19, 22, 23, 26, 33; 418, 420, 432, 438) in the operating state B, and

- where: $\sum_{i=1}^{n} p_{ij}(B) \leq p_{max}$, for all operating states B; and

d) the electrical power of each load i in the group of n electrical load elements (14, 15, 18, 19, 22, 23, 26, 33; 418, 420, 432, 438) is set to the power level $p_{ij}(B)$, with the maximum power level p_{imax} being assigned, at least during one of the operating states of the dishwasher (110; 410), to at least one load element (14, 15, 18, 19, 22, 23, 26, 33; 418, 420, 432, 438) in the group of n electrical load elements (14, 15, 18, 19, 22, 23, 26, 33; 418, 420, 432, 438).

2. (Original) The method as claimed in the preceding claim, characterized in that a power level p_{ik} exists for each electrical load i (14, 15, 18, 19, 22, 23, 26, 33; 418, 420, 432, 438), where $0 < k \leq m_i$ and where $p_{ik} = 0$.

3. (Currently Amended) The method as claimed in ~~one of the two preceding steps~~ claim 1, characterized in that $m_i = 3$ for all i.

4. (Currently Amended) The method as claimed in ~~one of the preceding claims~~ claim 1, characterized in that the following method steps are additionally carried out:

e) the dishwasher (110; 410) is started, as a result of which a starting phase begins;

f) at least one temperature of at least one washing liquid, in particular a temperature of water in at least one water tank (13, 17, 21; 416, 426) and/or water circuit, is detected;

g) the at least one washing liquid is heated,

- where at least one heating element (14, 18, 22, 26; 418, 432) which heats the washing liquid and forms the load element l where $l \in \{1,...,n\}$ is operated at the maximum power level p_{lmax} associated with this heating element (14, 18, 22, 26; 418, 432), and

- where at least one load element q (14, 15, 18, 19, 22, 23, 26, 33; 418, 420, 432, 438) which is not the same as the heating element (14, 18, 22, 26; 418, 432) and where $q \in \{1,...,n\}$ and $q \neq 1$ is operated at a lower power than the regular power level p_{qreg} associated with this load element q (14, 15, 18, 19, 22, 23, 26, 33; 418, 420, 432, 438); and

h) as soon as the at least one temperature of the at least one washing liquid has reached or exceeded a predetermined nominal value, a switched-on phase is started,

- where the power of all the load elements i (14, 15, 18, 19, 22, 23, 26, 33; 418, 420, 432, 438) is set to the respectively associated regular power level p_{ireg}.

5. (Original) The method as claimed in the preceding claim, having the following additional step:

i) at least one operating state variable is detected;

j) at least one operating state variable is allocated a nominal value; and

k) as soon as the value of the at least one operating state variable differs from the respectively associated nominal value by more than a predetermined tolerance, a load regulation phase is started.

6. The method as claimed in the preceding claim, characterized in that, in the load regulation phase, at least one load element r (14, 15, 18, 19, 22, 23, 26, 33; 418, 420, 432, 438) where $r \in \{1,...,n\}$ and which influences the at least one operating state variable which differs by more than the predetermined tolerance from its nominal value is operated at a power level which differs from its regular power level p_{rreg}, until the at least one operating state variable once again assumes a value which differs by not more than the predetermined tolerance from its nominal value.

7. (Currently Amended) The method as claimed in ~~one of the preceding claims~~ claim 1, characterized in that, in method step c), each load element (14, 15, 18, 19, 22, 23, 26, 33; 418, 420, 432, 438) is allocated a priority, and in that the optimum combination of the power levels pij(B) is determined taking into account the priorities of the load elements (14, 15, 18, 19, 22, 23, 26, 33; 418, 420, 432, 438).

8. (Original) The method as claimed in the preceding claim, characterized in that heating elements (14, 18, 22; 418, 432) which heat washing liquid, in particular water in at least one water tank (13, 17, 21; 416, 426) and/or water circuit, is allocated a higher priority than other loads.

9. (Currently Amended) The method as claimed in ~~one of the preceding claims~~ claim 1, characterized in that all of the operating states B are characterized by an operating phase variable F and/or by a plurality of operating state variables,

- where the operating state variable F can assume at least three discrete values (F_1, F_2, F_3),
- where F_1 denotes a starting phase for operation of the dishwasher (110; 410),
- where F_2 denotes a switched-on phase for operation of the dishwasher (110; 410), and
- where F_3 denotes the load regulation phase for operation of the dishwasher (110; 410).

10. (Original) An apparatus for energy-saving operation of a dishwasher (110; 410), in particular for washing dishes (9; 414) or medical appliances, with the dishwasher (110; 410) having a total number $N \geq 2$ of electrical load elements (14, 15, 18, 19, 22, 23, 26, 33; 418, 420, 432, 438), having:

a) means (310) for assignment of a maximum electrical total power p_{max} to a group of n electrical load elements (14, 15, 18, 19, 22, 23, 26, 33; 418, 420, 432, 438);

b) means (310, 332, 334, 336, 338, 340; 452, 454, 456, 458) for assignment of a finite number m_i of discrete electrical power levels p_{ij} to each electrical load element i in the group of n electrical load elements (14, 15, 18, 19, 22, 23, 26, 33; 418, 420, 432, 438),

- with there being a maximum power level p_{imax} for each i, where $p_{ij} \leq p_{max}$,

- where the sum of all maximum power levels p_{imax} form a worst total power

$p_{worst} = \sum_{i=1}^{n} p_{imax}$ where $p_{max} < p_{worst}$, and

- where a regular power level p_{ireg} exists for each i, where $0 < p_{ireg} < p_{imax}$ for all i, j,

and where $\sum_{i=1}^{n} p_{ireg} = p_{max}$;

c) means (310) for selection of an optimum combination of power levels $p_{ij}(B)$, as a function of an operating state B of the dishwasher (110; 410),

- where the selected power level $p_{ij}(B)$ for each i is matched to the power demand of the load element i (14, 15, 18, 19, 22, 23, 26, 33; 418, 420, 432, 438) in the operating state B, and

- where: $\sum_{i=1}^{n} p_{ij}(B) \leq p_{max}$, for all operating states B; and

d) means (310, 322, 324, 326, 328, 330, 332, 334, 336, 338, 340; 444, 446, 448, 450, 452, 454, 456, 458) for setting the electrical power of each load i (14, 15, 18, 19, 22, 23, 26, 33; 418, 420, 432, 438) in the group of n electrical load elements (14, 15, 18, 19, 22, 23, 26, 33; 418, 420, 432, 438) to the respective power level $p_{ij}(B)$, with the maximum power level p_{imax} being assigned, at least during one of the operating states of the dishwasher (110; 410), to at least one load element (14, 15, 18, 19, 22, 23, 26, 33; 418, 420, 432, 438) in the group of n electrical load elements (14, 15, 18, 19, 22, 23, 26, 33; 418, 420, 432, 438).

11. (Original) The apparatus as claimed in the preceding claim, additionally having:

e) means (310) for starting the dishwasher (110; 410) by which means a starting phase is started;

f) means (318, 320) for detection of at least one temperature of at least one washing liquid, in particular a temperature of water in at least one water tank (13, 17, 21; 416, 430) and/or water circuit;

g) at least one heating element (14, 18, 22, 26; 418, 432), which heats the at least one washing liquid and forms the load element l (14, 15, 18, 19, 22, 23, 26, 33; 418, 420, 432, 438) where $l \in \{1,...,n\}$, as well as means (322, 324, 326, 328; 448, 450) for operation of the at least one heating element (14, 18, 22, 26; 418, 432) at the maximum power level p_{lmax} associated with this heating element, as well as means (322, 324, 326, 328, 330; 444, 446, 448, 450) for operation of at least one load element q (14, 15, 18, 19, 22, 23, 26, 33; 418, 420, 432, 438), which is not the same as the at least one heating element, where $q \in \{1,...,n\}$ and $q \neq 1$ at a lower power than the regular power level p_{qreg} associated with this load element q (14, 15, 18, 19, 22, 23, 26, 33; 418, 420, 432, 438); and

h) means (310) for starting a switched-on phase as soon as the at least one temperature of the at least one washing liquid has reached or exceeded a predetermined nominal value,

- where the power of all the load elements i (14, 15, 18, 19, 22, 23, 26, 33; 418, 420, 432, 438) is set to the respectively associated regular power level p_{ireg}.

12. (Original) The apparatus as claimed in the preceding claim, additionally having:

i) means (318) for detection of at least one operating state variable;

l) means (310) for assignment of in each case one nominal value to at least one operating state variable; and

m) means (310) for starting a load regulation phase as soon as the value of the at least one operating state variable differs by more than a predetermined tolerance from the respectively associated nominal value.

13. (Original) The apparatus as claimed in the preceding claim, having additional means (322, 324, 326, 328, 330; 444, 446, 448, 450) for operation of at least one load element r (14, 15, 18, 19, 22, 23, 26, 33; 418, 420, 432, 438) where $r \in \{1,...,n\}$ which influences the at least one operating state variable which differs by more than the predetermined tolerance from its nominal value at a power level, which differs from its regular power level p_{rreg}, in the load regulation phase, until the at least one operating state variable once again assumes a value which differs from its nominal value by not more than the predetermined tolerance.

14. (Currently Amended) The apparatus as claimed in ~~one of the preceding apparatus claims~~ claim 1, characterized in that the means c) (310) for selection of an optimum combination of power levels $p_{ij}(B)$ have means (310) for allocation of a priority to each load element (14, 15, 18, 19, 22, 23, 26, 33; 418, 420, 432, 438) as a function of an operating state B of the dishwasher (110; 410), where the optimum combination of the power levels pij(B) is

determined taking into account the priorities of the load elements (14, 15, 18, 19, 22, 23, 26, 33; 418, 420, 432, 438).

15. (Currently Amended) The apparatus as claimed in ~~one of the preceding apparatus claims~~ claim 1, characterized in that the dishwasher is a multiple tank dishwasher (110).

16. (Currently Amended) The apparatus as claimed in ~~one of the preceding apparatus claims~~ claim 1, characterized in that the means b) (310, 332, 334, 336, 338, 340; 452, 454, 456, 458) for assignment of a finite number mi of discrete electrical power levels pij to each electrical load element (14, 15, 18, 19, 22, 23, 26, 33; 418, 420, 432, 438) and/or the means c) (310) for selection of an optimum combination of power levels pij(B) as a function of an operating state B of the dishwasher (110; 410) have/has a look-up table (314) and/or an electronic table.

17. (Currently Amended) A computer program having program code means in order to carry out a method as claimed in ~~one of the preceding method claims~~ claim 1, when the computer program is run on a computer (310) or a computer network.

18. (Original) A computer program having program code means as claimed in the preceding claim, which program code means are stored on a computer-legible data storage medium (314).